### Before the

### FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

In the Matter of	) August 30, 2012
	) Revised December 8, 2012 <sup>1</sup>
	) Revised February 25, 2013
ET Docket No. 04-186 (TV White Spaces)	)

#### SPECTRUM BRIDGE INC.

# REQUEST FOR TEMPORARY WAIVER OF

## PART 15 RULES FOR MELDTECH FIXED TVWS DEVICE (Amended)

Pursuant to 47 C.F.R. § 1.3<sup>2</sup>′ Spectrum Bridge respectfully requests that the Federal Communications Commission (FCC) waive certain TV White Space (TVWS) device requirements to permit the sale and operation of a limited number of low power devices manufactured by Meld Technology Inc. (MeldTech). The Meld Tech device is a low power TVWS device that is intended to be used at fixed locations in commercial and business environments only. The device includes an ATSC transmitter that will allow the user to display information on a regular digital television (DTV) set. By transmitting in HD video in 8-VSB and permitting the use of conventional DTV sets, the Meld Tech device offers commercial entities cost-effective digital signage capabilities, such as the ability to display product and sales information in a retail environment.

Resubmitted to accommodate concerns raised by the original filing

<sup>&</sup>lt;sup>2</sup> See ACS Order, 26 FCC Rcd at 14637 ¶ 188 (citing 47 C.F.R. § 1.3). Section 1.3 of the Commission's rules.

### **Temporary Waiver Request**

Spectrum Bridge, on behalf of MeldTech, is requesting that the FCC waive the prohibition against fixed devices operating on channels adjacent to TV operations for low power devices to be manufactured and installed by MeldTech (FCC Identifier: OKVMT300) over the next twelve (12) months. The MeldTech devices will be professionally installed, will not be offered for sale to the general public and will not exceed the maximum 40mW power requirement for personal/portable devices that are permitted to operate on adjacent television channels. Specifically we ask for waiver of: 47 C.F.R. §§ 15.711(b)(2) and 15.711(b)(3)(ii) Such that the 40mw Meld Device can be treated as a "professionally installed" mode II device until appropriate indoor location identification can be added (see below). The database will only allow operation of this Meld device on adjacent channels consistent with a personal portable device (channel 21 and above). In addition, the MeldTech devices will be programmed to contact the Spectrum Bridge database at least once every 30 minutes to confirm that the channels assigned by the database continue to be available to avoid any potential interference with licensed operations. Permitting this waiver will provide access to more channels indoors which can be utilized to provide parallel streams of content to different signs. In many urban areas the availability of channels for Fixed Use are extremely limited.

The MeldTech device will be a rack-mounted unit capable of streaming video content to television receiver devices using 8-VSB modulation. The geographic location of the device will be programmed into the device as part of professional installation of the device and will be part of the device registration process before the device can query the database with regard to available channels prior to operation. MeldTech Authorized Distributors would be responsible for ensuring that all devices are professionally and correctly installed. This Meld Tech device would not be sold to consumers or through consumer retail outlets. As stated above, the Meld Tech device offers commercial entities cost effective digital signage capabilities by transmitting display information in HD video using 8-VSB and permitting the use of conventional DTV sets. Since most applications are intended to be inside a commercial retail outlet like a "big box" electronics store and would be located indoors, the inclusion of GPS at this time would be not be a

practical or reliable way to determine the device's location.<sup>3</sup> Therefore, including GPS and classifying the device as a personal/portable TVWS would not provide for reliable operation.<sup>4</sup> In addition, the inclusion of GPS would require additional engineering and integration that would delay the device from getting to market. MeldTech requests the waiver to permit the marketing, manufacture and installation for a period of one year of its current device while providing additional time for MeldTech to develop other more reliable geo-location solutions for the environments the device is intended to operate in.

Spectrum Bridge believes that such a waiver will serve the public interest by increasing the potential opportunities for innovative use of TV White Space while satisfying the requirement to provide protection for incumbent operations.

The responsible party for compliance will be Meld Technology.

Peter Stanforth
CTO Spectrum Bridge Inc.
1064 Greenwood Blvd, suite 200
Lake Mary, FL 32746
peter@spectrumbridge.com

<sup>&</sup>lt;sup>3</sup> Unlike personal/portable devices that can be placed near a window or a location that provides reliable geo-location capability, the MeldTech device is intended to be used in commercial and industrial settings where such installation may not be practical.

<sup>&</sup>lt;sup>4</sup> In most cases because the device is intended to be used at fixed locations inside large commercial buildings, GPS would not provide reliable location information and therefore device would not be able to transmit.